

IN THE CLAIMS:

This listing of the claims will replace all prior revisions, and listings, of the claims in this application:

1. (Currently Amended) A brake system for a railway vehicle, which vehicle comprises a plurality of bogies, each of which bogies has at least one axle, wherein at least some of said axles are provided with axle speed sensors adapted to measure the speed of rotation of the respective axle, the output of the axle speed sensor being fed to a data processor, wherein the data processor is provided with local intelligence so as to permit individual control of brake pressure on each axle or bogie or car, the data processor being adapted to communicate with a brake control unit via a databus, the sensor outputs being processed so that the data can be communicated between the data processor and further data processors, which further data processors are adapted to process sensor outputs on further axles or bogies,

~~wherein, in use, the axle speed sensors are sampled in intervals of greater than 10 ms~~
the data processor is provided with a wheel slide control unit, which data processor and wheel slide control unit cooperate to function as a bogie-specific brake control unit, which, in use, controls the brake pressure independently of the main brake control unit, wherein the wheel slide control unit is connected to the databus so that the wheel slide control unit communicates with other bogie-specific brake control units associated with other bogies on the vehicle.

2. (Previously Presented) A brake system according to Claim 1, wherein each axle is provided with at least one axle speed sensor.

3. (Previously Presented) A brake system according to Claim 1, wherein the databus comprises a network cable or a radio link.

4. (Previously Presented) A brake system according to Claim 1, wherein at least one bogie per car is provided with a brake control unit adapted to provide at least one of wheel spin and wheel slide control on axles on that bogie.

5. (Previously Presented) A brake system according to Claim 1, wherein each bogie per car is provided with a brake control unit adapted to provide at least one of wheel spin and wheel slide control on axles on that bogie.

6. (Previously Presented) A brake system according to Claim 1, wherein the system is installed in a railway vehicle comprising multiple vehicles having a databus extending substantially along said multiple vehicles, wherein the brake pressure on one axle per multiple unit vehicle is released so as to permit determination of the ground speed of the vehicle.

7. (Previously Presented) A brake system according to Claim 6, in which the brake pressure on two axles is released to determine ground speed.

8. (Previously Presented) A brake system according to Claim 1, in which a further databus is provided in parallel to the first databus to provide redundancy.

9. (Previously Presented) A brake system according to Claim 1, wherein the intervals are about 100 ms.

10. (Previously Presented) A brake system according to Claim 1, wherein, when a fault is detected, the brake pressure on adjacent bogies is increased to compensate for the loss of the brake pressure at one axle or bogie to allow for the missing brake performance of the inoperative unit.